The Achievement Level Descriptors (ALDs) represent knowledge, skills, and abilities (KSAs) that tell the difference between each grade level. Students are responsible for KSAs at the previous grade(s) and Achievement Level(s). These assessment ALDs are not inclusive of all knowledge, skills, and abilities at each grade level.

# **Grade 10 Mathematics**

#### **Exceeds Standard**

Students at the Exceeds Standard level in mathematics demonstrate a more complete understanding of how to solve and justify mathematical and practical problems. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Estimate values of radical and exponential expressions and/or perform scalar multiplication on matrices.
- Solve problems involving functions.
- Analyze a solution to a problem involving functions.
- Justify financial decisions based on consumer data.

### **Meets Standard**

Students at the Meets Standard level in mathematics demonstrate the application and use of models and tools to solve mathematical and practical situations. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Estimate values of radical and exponential expressions and/or perform scalar multiplication on matrices.
- Solve problems involving functions.
- Interpret consumer data.
- Use various statistical measures to analyze data, make inferences, and/or draw conclusions.

### **Approaching Standard**

Students at the Approaching Standard level in mathematics demonstrate confidence with using concrete resources (tools). Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Subtract matrices.
- Determine domain and range graphically.
- Answer questions based on consumer data.
- Select appropriate statistical measures and/or answer questions based on normal distribution.

### **Emergent/Developing**

Students at the Emergent/Developing level find mathematics to be challenging. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Add matrices.
- Isolate a variable in a two-step equation.
- Distinguish between a sample and a census.

# **Grade 10 Reading**

#### **Exceeds Standard**

Students at the Exceeds Standard level in reading select from a variety of skills and strategies to enhance comprehension of text. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Analyze the elements of plot and/or setting based on evidence.
- Evaluate the effectiveness of changing the point of view.
- Evaluate the effectiveness of an author's use of language, syntax, and stylistic devices.
- Evaluate the effectiveness of the author's use of irony.
- Analyze the intended and unintended effects of persuasive and/or propaganda techniques.

#### **Meets Standard**

Students at the Meets Standard level in reading use skills and strategies to comprehend text. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Explain the relationship among elements of plot and/or setting.
- Explain how changing the point of view impacts elements of plot.
- Explain the author's use of language, syntax, and stylistic devices.
- Explain the author's use of irony.
- Analyze the logic and /or support of an author's argument, viewpoint, and/or perspective.

# **Approaching Standard**

Students at the Approaching Standard level in reading demonstrate a literal understanding of text. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Describe elements of plot.
- Explain how point of view affects the reader's understanding of plot.
- Identify stylistic devices.
- Describe the author's use of dramatic irony and/or irony of situation.
- Explain how a propaganda technique supports an author's argument, viewpoint, and/or perspective.

### **Emergent/Developing**

Students at the Emergent/Developing level find the process of reading text challenging. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Identify elements of plot.
- Explain how point of view affects the reader's understanding of a character.
- · Identify dramatic irony and irony of situation.
- Identify the author's use of propaganda techniques based on evidence.

# **Grade 10 Science**

#### **Exceeds Standard**

Students at the Exceeds Standard level in science demonstrate a more complete and quantitative understanding of grade-level science content and the ability to use science process skills to conduct original investigations. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Design and conduct original investigations.
- Describe processes involved in chemical reactions, including conservation of mass and energy.
- Quantitatively apply laws of motion to predict motion of an object.
- Differentiate structures and functions of cell organelles in plant and animal cells.
- Develop a model to demonstrate how changes in atmospheric levels of greenhouse gases impact weather and climate.

#### **Meets Standard**

Students at the Meets Standard level in science demonstrate a basic understanding of grade-level science content and abilities to use science process skills to conduct investigations. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Design experiments with given variables.
- Develop and use simple models to make predictions.
- · Apply laws of motion to systems of objects.
- Describe energy flow and transformation in living and nonliving systems.
- Identify structures and functions of components of a cell system.
- Identify how changes in greenhouse gases influence weather and climate.

# **Approaching Standard**

Students at the Approaching Standard level in science demonstrate a developing understanding of grade-level content and growing confidence using science process skills. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Partially design experiments.
- Identify states of matter and their characteristics.
- Explain how laws of motion operate in simple systems.
- Identify structures and functions of major cell parts.
- Identify the role of specified greenhouse gases in weather and climate.
- Identify that fossils provide evidence of Earth history.

### **Emergent/Developing**

Students at the Emergent/Developing level find science to be challenging. Students working at this achievement level exhibit the following knowledge, skills, and abilities:

- Identify steps included in designing experiments.
- Match states of matter with characteristics.
- Recognize that laws of motion affect simple systems.
- Identify major cell structures.

- Identify that the atmosphere is made of different gases that affect climate.
  Recognize fossils as evidence of previously living organisms.